

LISTING OF THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application:

1. (Currently Amended) A method of monitoring ~~the~~ integrity of a flexible pipe used for transporting a pressurized fluid in a terminal end-fitting of the flexible pipe, wherein the flexible pipe comprises at least an internal pressure sheath, plies of tensile armor wires and an outer sheath fastened to the end-fitting~~[[;]]~~, the method comprising:

monitoring the integrity of the tensile armor plies of the flexible pipe in the end-fitting by ~~monitoring~~ detecting a change in ~~the~~ a twist in the flexible pipe ~~near adjacent~~ the end-fitting, wherein the twist change ~~being~~ is a phenomenon associated with ~~the disorganization of a failure~~ of the armor plies as a result of a fracture of ~~several~~ two or more tensile armor wires inside the end-fitting.

2. (Currently Amended) The method as claimed in claim 1, ~~further comprising wherein~~ the monitoring of the change in the twist in the flexible pipe is by at least one strain gauge placed on the external sheath of the pipe.

3. (Currently Amended) The method as claimed in claim 1, wherein the end-fitting includes a gas drainage valve, and the monitoring of the integrity comprises ~~comprising~~ monitoring the quantity of gas escaping from the valve.

4. (Currently Amended) The method as claimed in claim 3, wherein ~~this~~ the monitoring of the quantity of gas escaping comprises measuring ~~the~~ a variation in at least one of ~~the~~ a discharge frequency and in ~~the~~ a discharge time of the gas.

5. (Currently Amended) A device for monitoring the integrity of a flexible pipe for transporting a pressurized fluid at a terminal end-fitting of the pipe, the pipe comprising at least an internal pressure sheath, plies of tensile armor wires and an outer sheath ~~that are~~ fastened to the end-fitting, the device for monitoring the integrity comprising:

a monitor monitoring device operable for monitoring detecting a failure change in a phenomenon associated with disorganization of the armor plies as a result of a fracture of ~~several~~ two or more tensile armor wires inside the end-fitting, the monitor monitoring device being operable to detect the failure by detecting an increase in ~~the~~ a twist in the flexible pipe ~~near~~ adjacent the end-fitting.

6. (Currently Amended) The device as claimed in claim 5, wherein the monitor monitoring device for detecting an increase in the twist in the pipe ~~comprise~~ comprises strain gauges at the pipe.

7. (Previously Presented) The device as claimed in claim 6, wherein the strain gauges comprise Bragg grating optical fibers.

8. (Currently Amended) The device as claimed in claim 5, wherein the monitor monitoring device includes a computing unit ~~that can~~ operable to generate an alarm depending on anomalies the monitor monitoring device detects.